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MASSACHUSETTS STATEWIDE QUALITY ADVISORY COMMITTEE

Year 1 Final Report

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Contents

EXECUTIVE SUMMARY

The Statewide Quality Advisory Committee (SQAC) is a diverse group of Massachusetts health care experts, industry stakeholders, and consumer advocates, chaired by the Commissioners of the Department of Public Health (DPH) and the Division of Health Care Finance and Policy (DHCFP). The Committee convened in 2012 with the goal of recommending the first-ever Standard Quality Measure Set (SQMS) in the Commonwealth. Utilizing the expertise of the SQAC members, as well as contributions from representatives of national quality measurement organizations on high priority topics and a robust public engagement strategy, the Committee succeeded in developing a consensus recommendation for a standard set of quality measures for the Commonwealth.

In order to develop a uniform, consensus measure set, the SQAC engaged in a priority setting process to identify high-impact areas of care delivery and population health for which there are gaps in quality measurement. To inform the approach to measure identification and selection, the Committee solicited expert testimony on the high-priority settings and clinical areas of care coordination and transitions, behavioral health care, post-acute care settings, and community and population health. For the first year, the SQAC determined that hospitals, community health centers, and post-acute care facilities would be the settings to which the recommended measure set would apply. The SQAC developed an evaluation framework against which all proposed measures were reviewed. The evaluation framework aligns with state and national standards of validity and reliability, and also considers the relative reporting burden upon providers.

The SQAC engaged in evaluation and deliberation of over 300 measures that were mandated or nominated for inclusion in the SQMS. SQAC members weighed factors such as duplicative reporting requirements, the availability of data sources, alignment with current public reporting efforts by private, state and federal organizations, and topics of particular interest to consumers. The SQAC voted to recommend 130 measures for inclusion in the initial SQMS. The recommended set covers a wide range of clinical areas, including preventive health care, chronic disease management, pediatric, maternal, and neonatal health, mental health, and substance abuse. It also includes indicators of efficiency, such as appropriate testing of upper respiratory infections and hospital readmissions, as well as measures of patient experience. This recommendation provides a solid base that will guide the promulgation of

regulations requiring uniform reporting of measures by the Center for Health Information and Analysis (CHIA), the successor agency to DHCFP.

As the SQAC's first annual meeting cycle concludes, it is evident that quality improvement is an evolving field. In future meeting cycles, the SQAC anticipates considering measure utilization domains (such as provider incentive programs, public reporting, quality improvement), and the appropriate use of SQMS measures in such domains. The SQAC will also continue to identify new priorities for quality monitoring and improvement, and recommend quality measures to meet those needs. The accomplishments of the SQAC in 2012 are a solid foundation upon which public and private payers, providers, policy makers, and consumers in the Commonwealth can develop quality improvement initiatives.

INTRODUCTION

Background

The Massachusetts Statewide Quality Advisory Committee (SQAC) was established by Chapter 288 of the Acts of 2010. Chapter 288 expanded the Commonwealth's authority to examine and reject premium increases, mandated new methods for tracking system-wide costs, and created a template for expanding innovative health insurance products, such as limited or tiered network plans. In the context of this overall emphasis on cost containment, policymakers were careful to ensure that savings not come at the expense of access to care and health care quality. In a system in which consumers were being increasingly asked to make cost-conscious decisions, there was a recognition that improved, standardized information about the overall value of health care was necessary to inform those decisions. It was within this context that the SQAC was convened.

Section 54 of Chapter 288 mandated that the advisory committee be co-chaired by the Commissioner of Public Health and the Commissioner of Health Care Finance and Policy, and include specific subject matter experts and industry stakeholders to issue a standard set of health care quality measures for each health care facility, provider type, and medical group in the Commonwealth. The resulting product is a Standard Quality Measure Set (SQMS) established through regulations that will require uniform reporting from providers. Ultimately, the SQMS will be a tool for multiple stakeholders to drive quality improvement and inform value-based decision making to promote a more efficient and effective health

care system. Pursuant to Chapter 288 Section 33, the Division of Insurance is also required to consider the SQMS in their recommendations to insurance carriers related to tiered plans for individual and small-group insurance products. The recent enactment of Chapter 224 of the Acts of 2012, *An Act Improving the Quality of Healthcare and Reducing Costs Through Increased Transparency, Efficiency, and Innovation*, builds on Chapter 288 with an innovative set of market-based cost containment and health planning activities, and places the responsibility for regulating the SQMS within CHIA, the successor agency to DHCFP.

Approaching Quality Measurement

Quality measurement is a necessary tool to assist health care providers in improving the care they deliver to patients, payers and policymakers in designing reimbursement systems that reward value in health care, and consumers in making decisions about what care to seek and where. However, lack of standardization is an ongoing challenge in using quality metrics for the above purposes. There has been a proliferation of quality information that is difficult to compare and often conflicting. Regardless of the objective of any particular measurement program – whether to aid consumers in selecting a hospital for their knee replacement, helping insurers reward systems that provide excellent care, or giving providers feedback as to whether their improvement initiatives are working – conflicting information is an obstacle to accomplishing the objectives.

There is broad consensus that the quality of health care can vary from provider to provider. Without standardization, one cannot know whether the variation in provider quality scores is due to real differences in the care patients receive, or other methodological factors. Methodological factors can include: the condition or procedure examined; whether a measure examines a structural issue compared to a patient outcome; the data from which information is sourced; the specifications in a given measure's methodology; how measures adjust for differences in population between providers; the level at which data are reported; or, the statistical tests performed to ensure reliability.

The SQAC has begun the process of standardizing quality measurement in the Commonwealth by bringing together experts and stakeholders to answer two questions: one, what should our priorities be for measurement standardization now and, two, what measures should we use to fulfill those priorities? The resulting recommendation for the SQMS is the first of many steps that will inform alignment of health care quality measurement efforts among consumer reporting websites, payer-provider incentive programs, governance and regulatory functions, alternative delivery models, such as accountable care organizations, and quality improvement projects throughout the Commonwealth.

GROUNDWORK FOR SQAC'S FIRST YEAR ACTIVITIES

Year 1 Priorities

The Co-Chairs focused the Committee's first year efforts on quality measures that can aid state government in evaluating the performance of integrated health care systems, such as Integrated Care Organizations, Accountable Care Organizations, and Patient Centered Medical Homes. The development of such systems is critical to the state goal of encouraging high-quality, coordinated, and affordable health care as evidenced by the focus on these models in Chapter 224. The SQAC was asked to consider the following three priority areas, each of which contributes significantly to the success of an integrated health care system:[1]

- *Efficiency and system performance*
- *Care transitions and coordination*
- *High-priority settings and clinical focus areas, specifically:*
    - *Behavioral health*
    - *Post-acute care settings*
    - *Community and population health*

The SQAC's Year 1 priorities were formed to align with current federal health initiatives, programs and policies, as well Massachusetts policies. In addition to expanding access to health insurance, the Affordable Care Act (ACA) includes a wide range of pilot programs that aim to promote high-quality, better-integrated health care. For instance, under the ACA, the United States Department of Health and Human Services (HHS) is required to design a National Quality Strategy and submit annual implementation updates to Congress. Similarly, the Measurement Applications Partnership (MAP), which is facilitated by the National Quality Forum (NQF), is a public-private partnership charged with providing recommendations to HHS on measure use, and aligning measure sets used by businesses, providers, government agencies, and communities alike. Though these and other federal initiatives and programs have different purposes and directives than the SQAC, they provide a rich context for the Committee and an opportunity to align state and federal health care quality priorities.

[1] For details regarding the rationale and Year 1 priorities for the SQAC, please visit http://www.mass.gov/eohhs/docs/dhcfp/g/sqac/priorities.pdf.

The National Quality Strategy (NQS) developed and released its initial strategy in 2011. The strategy establishes six key priority areas, one of which – *Promoting Effective Communication and Coordination of Care* – aligns with the SQAC priorities of *Care Transitions and Coordination*, as well as *Post-Acute Care Settings*. Within this priority area, HHS has identified three long-term goals:

1. Improve the quality of care transitions and communications across care settings.
2. Improve the quality of life for patients with chronic illness and disability by following a current care plan that anticipates and addresses pain and symptom management, psychosocial needs, and functional status.
3. Establish shared accountability and integration of communities and health care systems to improve quality of care and reduce health disparities.[2]

HHS has also identified key performance measures that it will use to track national progress in improvement of care transitions. The NQS also emphasizes the importance of efficiency and system performance. Another NQS priority – *Making quality care more affordable for individuals, families, employers, and governments by developing and spreading new health care delivery models* – overlaps with the SQAC priority of *Efficiency and system performance*. HHS identifies two long-term goals for this priority:

1. Ensure affordable and accessible high quality health care for people, families, employers, and governments.
2. Support and enable communities to ensure accessible, high quality care while reducing waste and fraud.[3]

Measures in this category include total annual health care spending per capita (regardless of payer type) and percentage of people under age 65 with out-of-pocket medical and premium expenses greater than ten percent of income.

The MAP also prioritizes care transitions in its quality measure sets, although less explicitly than HHS. MAP established eight measure selection criteria that it uses to evaluate and create measure sets, one of which is that the "measure set enables measurement across the person-centered episode of care,"

[2] 2012 Annual Progress Report to Congress: National Strategy for Quality Improvement in Health Care. U.S. Department of Health and Human Services. April 2012. Corrected August 2012.
[3] 2012 Annual Progress Report to Congress: National Strategy for Quality Improvement in Health Care. U.S. Department of Health and Human Services. April 2012. Corrected August 2012.

including the selection of measures that can be used to evaluate a variety of providers and settings, and that can be tracked over time. As national quality measurement initiatives continue to prioritize care transitions and the patient experience within a health care system, the SQAC too seeks to ensure that quality measurement is not limited to specific settings, clinical areas, or provider types.

As with the National Quality Strategy, MAP is also focused on systems issues; its fourth criterion for measure selection is that the "program measure set promotes alignment with specific program attributes, as well as alignment across programs."[4] Each of these federal priorities supports the SQAC's goal to recommend quality measures that can aid state government in evaluating the performance of integrated healthcare systems. As Massachusetts begins to implement Chapter 224, this focus on system performance and efficiency will become increasingly important. The lack of integration of behavioral health and physical care in the Commonwealth is a key cost driver, creates quality of care issues, and contributes to the lack of coordination across our health care system. Compared with physical care, there are relatively few evidence-based, widely collected measures of the quality of behavioral health care. Given SQAC's focus on care transitions and system efficiency, and the volume of behavioral health care services in the Commonwealth, this under-measured area was a clear priority for the Administration.

One of the MAP criteria is that a measure set "adequately address high-impact conditions relevant to the program's intended populations." The MAP report includes a list of high-impact conditions for Medicare beneficiaries and children. The first condition on the list for Medicare beneficiaries is depression, and Alzheimer's disease is sixth. More than one-third of the conditions on the pediatric list pertain to behavioral health, including developmental delay, behavioral or conduct problems, and depression. The high-impact designation of these conditions signals the importance of prioritizing behavioral health quality measurement in the coming years. The Centers for Disease Control and Prevention (CDC) have also prioritized behavioral health through its Healthy People 2020 goals. The CDC has chosen 12 specific objectives related to mental health and mental disorders in topic areas such as suicide, eating disorders, depression screening by primary care providers, and receipt of mental health services among homeless adults.

[4] Measure Applications Partnership: Strategic Plan 2012-2015. National Quality Forum. Public Comment Draft.

The SQAC's final Year 1 priority is community and population health, which is an essential and underdeveloped area of quality measurement. Healthy People 2020 have identified 16 specific objectives in the area of educational and community-based programs, with topics such as worksite health promotion, school health education, and workforce training in clinical prevention and population health issues. The NQF recently issued a call for measures related to community and population health as well, which indicates a growing interest in this area of quality on the national stage. Although there are very few well-tested measures in community and population health, the SQAC is committed to ensuring that these measures are well represented in the SQMS as they are developed.

FIRST-YEAR MEETING CYCLE

The primary objective of the SQAC is to identify and endorse measures for inclusion in the SQMS and recommend future priorities for quality measurement in the Commonwealth. As such, SQAC members evaluate and recommend quality measures based on how well they align with the criteria of priority, practicality, and validity (see Appendix 2). For the first year, the priorities identified by the DPH were

- *Efficiency and system performance*
- *Care transitions and coordination*
- *High-priority settings and clinical focus areas, specifically:*
    - *Behavioral health*
    - *Post-acute care settings*
    - *Community and population health*

Validity was assessed on a number of principles designed to indicate whether a measure is sound, just, and well-founded. Practicality was assessed based on whether the reporting of data to calculate a measure is pragmatic, is non-duplicative, and does not present an additional burden to providers.[5] Both practicality and validity were based upon the previous work of the Commonwealth's Health Care Cost and Quality Council and the Expert Panel on Performance Measurement. The confluence of priority, practicality, and validity were rated by SQAC staff and consultants, and measures were ranked according to strong,

[5] For a detailed discussion of the principles for evaluating the validity and practicality of a measure, please see Appendix C.

moderate, or weak/no recommendation as described below and in Figure 2. The SQAC's decisions to include quality measures in the SQMS were also informed by recommendations from experts.

The SQAC met nine times between January 25, 2012 and November 9, 2012. Meeting agendas and schedules are described in Figure 1.

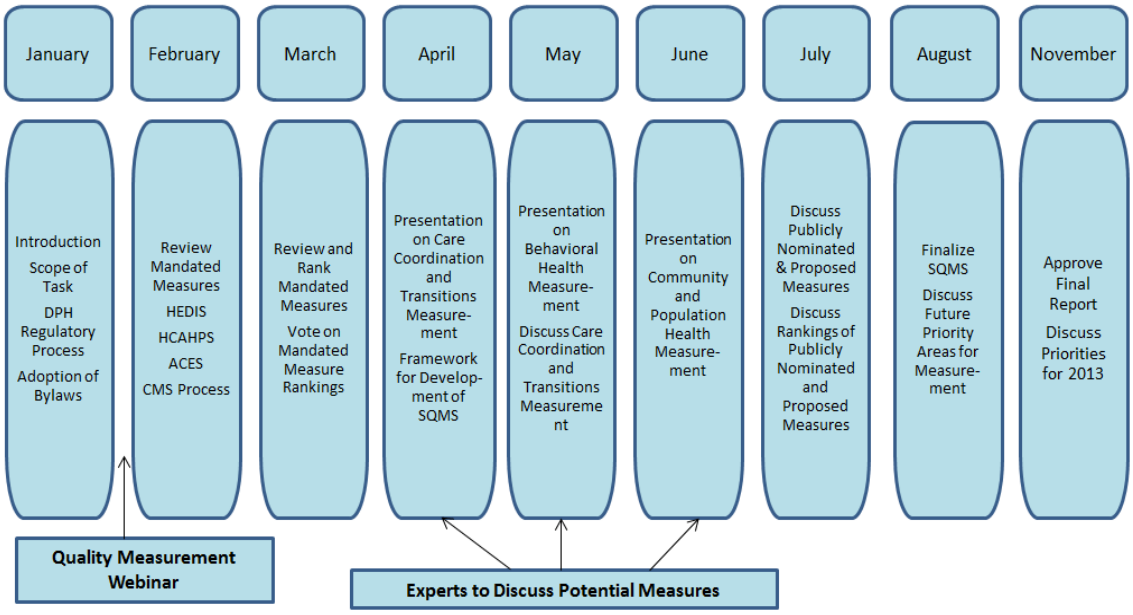

FIGURE 1: SCHEDULE OF MEETINGS FOR SQAC YEAR 1

EXPERT PRESENTERS AND FINDINGS

Throughout the measure selection process the SQAC continually expressed its commitment to making evidence-based decisions. In order to better inform its recommendations, therefore, the SQAC sought input from nationally recognized experts on the three Year 1 high-priority settings and clinical focus areas. Each of the experts gave a presentation before the Committee, participated in a discussion with SQAC members, and was invited to make specific measure recommendations for the Committee's consideration.

Post-acute Care Settings: Dr. Amy Boutwell, founder of Collaborative Healthcare Strategies, presented on quality measures related to care transitions and post-acute care settings. Care transitions refers to

patients' movement between healthcare settings and from the care of one provider to another as their condition and care needs change throughout the course of an illness. Improving transitions can reduce rates of re-hospitalization and patient harm, and improve care coordination and communication, leading to enhanced care in post-acute settings. Several areas were identified for improvement in care transitions including effective communication between practitioners across care settings, medication reconciliation between facilities to reduce adverse drug events, and identification of "avoidable" admissions including observation stays and utilization of emergency departments.

Dr. Boutwell recommended incorporating several existing measures from home health and nursing facilities into the SQMS, in addition to proposing new measures regarding the transfer of electronic health information. The recommended measures are detailed in Figure 2, below.

Setting	Recommended Measures
Home Health Care	• Timely initiation of care • Acute care hospitalization • Emergency department use without hospitalization
Skilled Nursing Facility	• Percent of residents with pressure ulcers that are new or worsened (short-stay) • Percent of high risk residents with pressure ulcers (long stay) • 30-day hospitalizations • ED utilization
Statewide	• Transition record given to discharged patients • Transition record received by next provider within 24 hours

FIGURE 2. EXPERT RECOMMENDATIONS FOR POST-ACUTE CARE SETTING MEASURES

Behavioral Health: Dr. Deborah Garnick and Dr. Connie Horgan, professors at Brandeis University, presented on the historical background of behavioral health quality measurement and explained current national measurement initiatives. Drs. Garnick and Horgan also outlined the behavioral health measures that were mandated for inclusion in the SQMS, reviewed the existing gaps and proposed additional behavioral health measures for inclusion. Drs. Garnick and Horgan suggested that because the mandated behavioral health measures focus on patients who have already being treated for behavioral health issues, additional measures should emphasize screening and prevention. The experts ultimately recommended the inclusion of the behavioral health measures described in Figure 3, all of which are endorsed or are expected to receive endorsement by the NQF.

Setting	Recommended Measures

Community Health Center	• Alcohol screening and brief intervention
	• Measure pair:
	  ○ Tobacco use assessment
	  ○ Tobacco cessation intervention
	• Emergency department use without hospitalization

FIGURE 3. EXPERT RECOMMENDATIONS FOR BEHAVIORAL HEALTH MEASURES

Community and Population Health: Dr. Paul Jarris, Executive Director of the Association of State and Territorial Health Officials (ASTHO), presented on strategies for incorporating community and population health into the broader landscape of quality measurement. In his presentation, Dr. Jarris examined evidence regarding the key determinants of health, which suggest that population health factors are responsible for sixty percent of premature mortality nationwide. Quality measures designed to evaluate community and population health should examine community-wide health indicators, rather than specific patient outcomes or patient-provider interactions. For example, NQF Measure # 717, number of school days children miss due to illness, encourages hospitals and community health centers to engage with the community as a whole rather than only with the individual patients who receive care in their facilities. Attention to this area is growing, the NQF recently sent out a call for measures focused on social, economic and environmental determinants of health. However, measurement in this area is still in early development, and implementing many of the NQF-endorsed measures would require a significant culture shift in how hospitals should be expected to influence community-wide health. Dr. Jarris did not recommend any specific measures for inclusion in the SQMS, but encouraged the SQAC to prioritize community and population health in the coming years as more measures are designed and tested.

In subsequent discussions, the SQAC indicated a need for flexibility in evaluating and recommending new measures for inclusion in the SQMS. While well-tested measures are preferable to those that have not been thoroughly evaluated, certain topic areas with underdeveloped measures such as community and population health should not be eliminated from consideration despite not meeting adopted standards for inclusion in the SQMS. One approach the SQAC considered was bundling community and population health measures with more traditional process and outcomes measures to provide a sense of the interaction between service delivery and community health.

As a result of these presentations, the SQAC co-chairs proposed a variety of measures for inclusion in the SQMS, many of which were adopted in the final recommendations of the Committee.

MEASURE RECOMMENDATIONS

Evaluation of Mandated Measures

In the creation of the SQAC, the Legislature identified four specific measure sets that the Committee was required to include in the SQMS. These four sets, including, Centers for Medicaid and Medicare Services' Hospital Process Measures, Hospital Consumer Assessment of Healthcare Providers and Systems Survey (HCAHPS), Healthcare Effectiveness Data and Information Set (HEDIS), and Ambulatory Care Experiences Survey (ACES) represent more than 90 measures for both hospital and outpatient settings.

The requirement to include the four mandated sets provided the SQAC with a useful basis upon which to construct the SQMS, but also a number of logistical challenges related to minimizing the reporting burden on providers and ensuring measures meet a threshold of validity and practicality.[6] In order to reconcile these issues, the SQAC developed a broad structure for categorizing the mandated measures with different levels of "strength" for its recommendation (see Figure 4). Mandated measures that were both sufficiently valid and practical were given a strong recommendation; measures that were either sufficiently valid or sufficiently practical (but not both) were given a moderate recommendation; and measures that were neither sufficiently valid nor practical were given a weak recommendation.

[6] For a detailed discussion of the principles for evaluating the validity and practicality of a measure, please see Appendix C.

	Sufficient Practicality	Insufficient Practicality
Sufficient Validity	Strongest recommendation • 49 of the mandated measures fell into this category	Measure is considered valid, but further infrastructure development is needed for a strong recommendation • 29 of the mandated measures fell into this category, due to identified difficulties in calculating results from readily available data
Insufficient Validity	Measure is considered not sufficiently valid, and further work on the methodology is needed for a strong recommendation • 17 of the mandated measures fell into this category, due to evidence of low provider variation in performance scores	Weakest/No recommendation • None of the mandated measures fell into this category

FIGURE 4: METHOD FOR MEASURE STRATIFICATION

Solicitation of public nominations for quality measures

To ensure the SQAC process was informed by a variety of stakeholders, and represented diverse perspectives, public input into the selection of quality measures was actively sought through a call for measure nominations. A web-based survey tool was made available through which members of the Committee and the public nominated quality measures for consideration in the SQMS. Nominators were required to provide information about the measure's developer, whether a measure addressed a SQAC priority, source for methodology, and setting(s) where measure is currently being utilized. SQAC staff compiled and distributed the list of nominated measures for public review, after which a Committee member was required to formally propose a measure for evaluation in order to trigger a comprehensive evaluation process by the SQAC. This process resulted in 244 public submissions, 81 of which were formally proposed by Committee members and evaluated by the SQAC.

Constructing the SQAC Recommendation

The SQAC's measure set recommendation includes 95 measures mandated per statute, and 35 measures adopted through public nominations. The final SQMS recommendation is organized by setting and by priority area, and can be found in Appendix A.

Mandated Measures: The CMS Hospital Process measures quantify how often a provider gives evidence-based, recommended care to patients with specific conditions or health needs (e.g. heart attack patients given aspirin at arrival), and are designed for use in inpatient settings. The SQMS will contain 21 quality measures from the CMS Hospital Process set, including nine measures of appropriate acute care, three measures of chronic disease management, and fourteen measures of safety and mortality.[7] The public reporting of these process measures by CMS has been associated with improvements in hospital quality scores, which led to improved health outcomes for patients, such as lower mortality and readmissions rates for acute myocardial infarction, lower readmissions rates for heart failure, and reduced pneumonia mortality.[8]

The Hospital Consumer Assessment of Healthcare Providers and Systems Survey (HCAHPS) and the Ambulatory Care Experiences Survey (ACES) are questionnaires designed to measure a patient's experiences with and perspective on their hospital and ambulatory care, respectively.[9] Patient experience data is a valuable resource for consumers, payers, providers, and policymakers. According to a national survey conducted by the Kaiser Family Foundation, 65% of respondents said they were most likely to seek information comparing doctors and hospitals from fellow consumers, and nearly 40% reported they would likely use and view health care quality comparisons prior to accessing care.[10] The SQMS will include 13 HCAHPS measures and eight ACES measures, which can measure a patient's perspective on care coordination and provider communication, at both the organizational and patient-doctor interaction levels. HCAHPS data are publicly reported on the consumer websites *Hospital Compare* and *MyHealthCareOptions*, and ACES data is publicly reported by the Massachusetts Health Quality Partners for over 400 medical practices in the Commonwealth.[11]

The HEDIS measures to be included in the SQMS evaluate provider performance across five domains of care. More than 90% of health plans nationwide use this tool to measure provider performance and the

[7] Because quality measures can evaluate care given in more than one clinical domain, these numbers do not sum the total number of measures drawn from the set.
[8] Werner, R.M., Bradlow, E.T. (2010). Public Reporting on Hospital Process Improvement Is Linked to Better Patient Outcomes. *Health Affairs, 29*(7), 1319-1324.
[9] For purposes of the Standard Quality Measure Set, Massachusetts will be adopting the Massachusetts Health Quality Partners (MHQP) version of ACES, a slight modification of the initial set, so as to ensure minimization of reporting burden on providers.
[10] Kaiser Family Foundation. (2004). National Survey on Consumers' Experiences with Patient Safety and Quality Information.
[11] HCAHPS currently includes only ten measures but CMS has announced that on January 1, 2013 the CTM-3 measure will added to the requisite set.

National Committee on Quality Assurance (NCQA) publicly reports results for most plans aggregated at the plan level. Additionally, a subset of HEDIS measures are reported by MHQP and included on *MyHealthCareOptions.*[12] Of the 53 HEDIS measures included in the SQMS, a broad range of conditions, procedures, and clinical processes are represented; there are measures to evaluate asthma care, rates of breast cancer screening, use of high-risk medications among elderly patients, and follow-up care after a hospitalization for mental illness.

Non-mandated measures: Committee members and the public nominated a total of 244 quality measures for inclusion in the SQMS. SQAC members then proposed 81 of the initial 244 measures to be considered for inclusion in the final set. All of these proposed measures were evaluated by SQAC staff against the consensus priorities. After considering the practicality and validity framework and the overall composition of the SQMS, the Committee approved a set of 35 nominated measures that, combined with the four mandated measure sets detailed above, make up the SQMS recommendation. These 35 measures cover a range of conditions, both acute and chronic, patient experiences and clinical settings, and are listed in full in Appendix A.

Efficiency and system performance: The SQMS recommendation includes safety and mortality measures from the Agency for Healthcare Research and Quality (AHRQ) such as the number of surgical patients who develop deep vein thrombosis or pulmonary emboli, rates of pressure ulcers among hospital patients, rates of post-operative respiratory failure, and the number of infections in patients with central line catheters.

Care transitions and coordination: To address the care coordination and transitions priority area, the SQMS recommendation includes measures that can be used to assess organizational, provider-patient, and provider-provider communication standards, such as the MassHealth's timely transmission of medical records. The recommendation also includes CMS measures that can determine the rates of acute care

[12] See SQAC Meeting materials, February 21, 2012: http://www.mass.gov/eohhs/gov/commissions-and-initiatives/statewide-quality-advisory-committee/

hospitalizations and receipt of emergency care, as well as the timeliness of the care provided. Communication of patient prescription information and medication errors can be evaluated using the Leapfrog Group's Computerized Physician Order Entry (CPOE) standards, and the Yale/CMS measure can be used to evaluate hospital-specific all-cause readmission rates. The recommendation also includes measures to evaluate patients' transition to home-based, hospice, and palliative care.

Behavioral health: The SQMS recommendation includes measures that can be used to evaluate providers' efforts to assess tobacco use and undertake cessation initiatives, screen and counsel patients for unhealthy use of alcohol, and screen for clinical depression. The recommendation also includes measures to evaluate adherence to antipsychotic medications among individuals with schizophrenia, as well as the number of patients discharged while receiving multiple antipsychotic medications.

Post-acute care settings: The SQMS recommendation includes measures to assess the quality of care patients receive in skilled nursing facilities, such as the proportion of facility residents with new or worsening pressure ulcers and the proportion of residents who report moderate to severe pain.

Community and population health: The SQMS recommendation contains a wide range of measures that when applied appropriately can be used to measure community and population health. For example, two measures from the Joint Commission are intended for assessment of the quality of pediatric inpatient asthma care. Adult asthma admission rates in a given population can be assessed using an AHRQ measure. The quality of care around preventing hospitalizations for a variety of chronic conditions (chronic obstructive pulmonary disease, diabetes, asthma, and congestive heart failure) can be evaluated using measures from the Joint Commission and AHRQ. Similarly, rates of low birth weight babies in the population can be assessed using an AHRQ measure. Additionally, the recommendation includes measures that be used to evaluate the quality of several factors of acute maternal and neonatal care experiences.

FUTURE PRIORITY AREAS

The goal of the SQAC is to promote high quality care, to ensure payment mechanisms pertaining to quality are supported by a uniform set of measures, to drive system-wide efficiency and delivery system transformation, and to enable patients and their families to make educated decisions about where to access care through public reporting initiatives. Identifying specific measures to be included in the SQMS is the

first step in this process, but recommending measures alone is not sufficient to achieve these goals. In the coming years, the SQAC will participate in the development of a statewide quality measurement strategy with public and private partners that goes beyond evaluating individual measures, to identifying and addressing specific challenges in healthcare quality. Additional questions that the SQAC may consider include how to link measurement to improvement efforts, how to integrate existing measurement activities to avoid duplication, and how to use the SQMS to focus attention on clinical areas and settings that have thus far received insufficient focus in quality measurement conversations. To that end, the SQAC has identified several goals and topic areas that it will address in the coming years.

Measure Suitability and Use

A future activity of the SQAC may be to examine the suitability of measures in the SQMS to help promote the optimal use of each measure. Assigning suitability categories serves the purpose of linking quality measurement to action. By deeming measures suitable for quality improvement, the SQAC implicitly recommends that formal quality improvement efforts be undertaken, whether by individual hospitals, patient safety organizations, or government agencies. Declaring a measure suitable for accountability through accreditation or regulation puts pressure on those bodies to adopt the measures into their review processes and to publicly report the quality performance data.

To begin assessing measure suitability and use, the SQAC anticipates drawing upon a variety of evidence-based resources available in national and regional quality measurement initiatives, and developing consensus on a framework for guiding measure utilization. In future meetings, the SQAC may evaluate measures proposed for inclusion on the SQMS using the Physician Reporting Guidelines of the American Medical Association, or the Principles for Quality Measurement standards developed by the Massachusetts Medical Society. The Agency for Healthcare Research and Quality (AHRQ) requests that all measures submitted to the National Quality Measures Clearinghouse (NQMC) are in current use or have been pilot tested within the last three years, and that they include an assigned “state of use” category. NQMC lists 31 potential measure applications that fall into three broad categories: quality improvement, including internal and external efforts; accountability, whether to consumers through public reporting, payers through pay-for-performance initiatives, or government and boards for regulatory activity; and research. While many measures fall into multiple categories, AHRQ emphasizes that

measures should not be used beyond their intended purpose; for example, AHRQ notes that "the requirements for validity and reliability are higher when using measures for accountability." [13] However, AHRQ does not provide specific guidance as to how the threshold for higher validity and reliability should be determined. The NQF also considers how a measure will be used when it decides whether or not a measure is suitable for endorsement. Measure submissions must address questions about the usability and use of the measure, including accountability/transparency, improvement, and unintended consequences. All measures endorsed by NQF are presumed to be suitable for both provider accountability and quality improvement; however, a Task Force within NQF is engaging in work to establish evaluation guidelines for more specialized categories of measure usability.

Alignment with Other Measurement Efforts

Throughout the Year 1 process, individual members and the SQAC as a whole emphasized the importance of improving quality measurement without putting an undue burden on providers and facilities. Identifying a uniform set of quality measures is only the first step in aligning the standards of quality applied to providers. Further specification is needed to determine the recommended applications for measures, as well as methodological subtleties including which populations are excluded from calculations, thresholds for statistical reliability, and consistency in data sourcing. SQAC staff have already begun the process of comparing the measures in the SQMS to measures that are collected by other organizations, such as CMS, MassHealth, payers, and key collaboratives. Alignment with other organizations will benefit consumers and providers alike; consumers will have access to clear information about their providers that does not vary by reporting agency and providers' reporting burden will be minimized. By aligning its recommendations with existing measurement efforts, the SQAC can help promote standardization across the healthcare continuum, and may be able to suggest the adoption of new measures by existing organizations. By emphasizing coordination and minimizing provider burden, the SQAC will enhance its reputation as an expert body that both providers and consumers trust to participate in direction-setting for quality measurement in the Commonwealth.

[13] http://www.qualitymeasures.ahrq.gov/selecting-and-using/using.aspx

The NQF has placed a similar emphasis on measure alignment as seen in the creation of the Measure Applications Partnership (MAP). The MAP brings together public and private groups to provide recommendations to the U.S. Department of Health and Human Services (HHS) on quality measures to be used for public reporting, pay-for-performance programs, and alignment with measures that are being used in the private sector. MAP's structure and process are similar to the SQAC structure and process. Much like the SQAC, the MAP provides direction to HHS about quality measures for areas and settings of care. The SQAC is committed to staying abreast of the MAP's recommendations and will work to align its recommendations with theirs where possible to maintain consistency between state and federal reporting requirements.

Testing New Measures

In the first year of meetings, some measures were proposed for inclusion in the SQMS that have not yet been tested on a large scale. While the SQAC expressed concern about using these untested measures in Year 1, many committee members felt that a strategy was needed for how these measures would be incorporated into the SQMS in future years. Committee members expressed a desire to include innovative topics, such as population and community health measurement, in the discussion, rather than avoid them due to their underdevelopment. Interest was shown in developing a trial and error period for new measures; the measure could be reported in a de-identified manner while adjustments were made to methodology and practice, while providers were given an opportunity to become more comfortable reporting new information. Regardless of the specific strategy recommended by the SQAC, relatively new, unstudied measures such as domestic violence screening will be recognized as high priority topics in the coming years.

Patient Engagement

Committee members identified measures of patient engagement as an area for future examination. As the health care system continues to move toward greater integration of care and alternative payment and delivery models, such as accountable care organizations and patient-centered medical homes, patient engagement measures can help to inform delivery system transformations and drive quality improvement initiatives. Specifically, the Committee may consider including in the SQMS measures of patient confidence and shared decision making. Currently, some measures of patient engagement have been tested but are not yet used broadly.

Measurement Across the Continuum of Care

The final list of measures recommended by the SQAC is broken down into four settings of care: community health centers, hospitals, skilled nursing facilities and home health care. The overwhelming majority of recommended measures fell into the community health center and hospital categories. In coming years, the SQAC will explore different settings of care such as private outpatient practices and ambulatory surgery centers and will also seek to add more measures designed for skilled nursing facilities, long term care facilities and cross-continuum services. In addition to alternative sites of care, the SQAC will also focus on clinical specialties and provider types whose practice is currently under-measured. Emergency Medical Service providers, pediatricians, and other specialists may also be given special attention in coming years. Recognizing that high quality care depends on the interaction between different settings and that preventative and post-acute care have a large influence on overall health outcomes, the SQAC will prioritize incorporating all of these stakeholders into quality measurement initiatives in the future.

CONCLUSION

In the course of nine months, the SQAC developed an evaluation process, a variety of analytic tools, and a consensus framework for developing a standard quality measure set for the Commonwealth. Through discussions involving multi-stakeholder participation and competing agendas, the SQAC built consensus to focus on the core issue at hand – the needs of the Commonwealth and its residents in recognizing and rewarding high quality healthcare across the continuum through a variety of delivery and payment system transformations. The SQAC looks forward to future years of developing and enhancing the groundwork laid in the first annual cycle of the Committee's work. Much is changing the Massachusetts health care landscape, including a new home for the SQAC beginning in November. The SQAC looks forward to ongoing collaboration across the Administration, including with the Health Policy Commission, the Center for Health Information and Analysis, and the Executive Office of Health and Human Services as we collectively seek to achieve the three-part aim of improved health for populations, improved care for each Massachusetts resident, and lower costs for the system.

The SQAC particularly wishes to thank its members: Co-Chairs Commissioner John Auerbach and Commissioner Àron Boros, Diane Anderson, Dr. James Feldman, Dana Gelb Safran, Dr. Julian Harris,

Jon Hurst, Dr. Richard Lopez, Dolores Mitchell, and Amy Whitcomb Slemmer. Additionally, the SQAC wishes to thank those who came as designees for appointed members of the Committee.

The SQAC also wishes to express special gratitude to the leadership of Dr. Madeleine Biondolillo, Miriam Drapkin, and Iyah Romm whose expertise and hard work facilitated the development of the standard quality measure set recommendation. The SQAC staff were integral in supporting the Committee and the Co-Chairs – Cristi Carman, Julia Cohen, Julian D'Achille, Katherine Fillo, Kara Murray, and especially Christina Wu. Valued expertise was provided by Dr. John Freedman and Ben Stewart of Freedman Consulting as well as by Drs. Amy Boutwell, Deborah Garnick, Andrew Hackbarth, Constance Horgan, and Paul Jarris. Additional support was provided by Drs. Ann Lawthers and David Polakoff, as well as Deborah Wachenheim.

APPENDICES

Appendix A – Standard Quality Measure Set

See accompanying spreadsheet.

Appendix B – Statewide Advisory Committee on a Standard Quality Measure Set Section 54 of Chapter 288 of the Acts of 2010 (as amended by Chapter 359)

The department of public health shall promulgate regulations under section 25P of chapter 111 of the General Laws by April 1, 2011requiring the uniform reporting of a standard set of health care quality measures for each health care provider facility, medical group, or provider group in the commonwealth hereinafter referred to as the "Standard Quality Measure Set."

The department of public health shall convene a statewide advisory committee which shall recommend to the department by January 1, 2011 the Standard Quality Measure Set.

The statewide advisory committee shall consist of the commissioner of health care finance and policy or the commissioner's designee, and the commissioner of the department of public health or the commissioner's designee, who shall serve as co-chairs; and up to 8 members, including the executive director of the group insurance commission and the Medicaid director, or the directors designees; and up to 6 representatives of organizations to be appointed by the governor including at least 1 representative from an acute care hospital or hospital association, 1 representative from a provider group or medical association or provider association, 1 representative from a medical group, 1 representative from a private health plan or health plan association, 1 representative from an employer association and 1 representative from a health care consumer group.

Members of the committee shall be appointed for terms of 2 years and shall serve until the term is completed or until a successor is appointed. Members shall be eligible to be reappointed and shall serve without compensation.

In developing its recommendation of the Standard Quality Measure Set, the advisory committee shall, after consulting with state and national organizations that monitor and develop quality and safety measures, select from existing quality measures and shall not select quality measures that are still in development or develop its own quality measures.

The committee shall annually recommend to the department of public health any updates to the Standard Quality Measure Set by November 1.

For its recommendation beginning in 2011, the committee may solicit for consideration and recommend other nationally recognized quality measures not yet developed or in use as of November 1, 2010, including recommendations from medical or provider specialty groups as to appropriate quality measures for that group's specialty.

At a minimum, the Standard Quality Measure Set shall consist of the following quality measures: (i) the Centers for Medicare and Medicaid Services hospital process measures for acute myocardial infarction, congestive heart failure, pneumonia and surgical infection prevention; (ii) the Hospital Consumer Assessment of Healthcare Providers and Systems survey; (iii) the Healthcare Effectiveness Data and Information Set reported as individual measures and as a weighted aggregate of the individual measures by medical or provider group; and (iv) the Ambulatory Care Experiences Survey.

Appendix C – Statewide Quality Advisory Committee Bylaws

This document serves to define a process by which the Committee will function, including but not limited to group process, identification, review and evaluation of candidate measures of quality, and prioritization of recommendations in an organized, efficient way that leads to the completion of a set of measures suited to the purposes of Chapter 288, Section 54 of the Acts of 2010.

Statutory Reference: **Chapter 288, §54 of the Acts of 2010**

Chapter 288, §54 of the Acts of 2010, as amended by Chapter 359 of the Acts of 2010, establishes the Statewide Quality Advisory Committee (SQAC). The SQAC will make recommendations that would require uniform reporting of a standard set of health care quality measures for health care providers, facilities and provider groups to be promulgated by the Department of Public Health (DPH).

The SQAC is co-chaired by the Commissioner of Public Health and the Commissioner of Health Care Finance and Policy. The members of the Committee are appointed by the Governor and are as follows:

- Executive Director of the Group Insurance Commission
- Director of Medicaid Office
- Representative from an acute care hospital or hospital association
- Representative from a provider group, medical association or provider association
- Representative from a medical group
- Representative from a private healthcare plan or health plan association
- Representative from an employer association
- Representative from a health care consumer group

- The SQAC should examine existing quality measures and consult with experts as necessary. These quality measures must include:

- CMS Hospital process measures for heart attacks, congestive heart failure, pneumonia and surgical infection prevention
- The US Department of Health and Human Services' Hospital Consumer Assessment of Healthcare Providers and Systems Survey (HCAHPS), which is a national, standardized survey of hospital patients.

- The Healthcare Effective Data and Information Set (HEDIS), a survey that is administered by the National Committee for Quality Assurance (NCQA). This national survey is used by more than 90% of health care plans to measure performance on care and service.
- The Massachusetts Ambulatory Care Experiences Survey

The final recommendations of this Committee will serve to advise DPH in promulgating regulations under M.G.L. Chapter 111, §25P.

Open Meeting Law:

Pursuant to MGL c.30A, s.18-25, the meetings of the SQAC are subject to Open Meeting Law (OML). The Massachusetts Attorney General's Regulation 940 CMR 29.10 allows remote participation in a meeting subject to specific restrictions defined in the regulation. The SQAC has voted to permit remote participation in instances in which circumstances meet the compass of unreasonable difficulty and in which a quorum of the public body is physically present, in alignment with OML guidelines and as adjudicated on a case-by-case basis by the Co-Chairs. No committee member may utilize the remote participation function of OML for more than two meetings per year.

Bylaws Overview

The name of the committee shall be the Statewide Quality Advisory Committee (SQAC). As defined under Chapter 288, §54 of the Acts of 2010 the purpose of the SQAC is to serve in an advisory role to the Department of Public Health ("Department") and the Division of Health Care Finance and Policy ("Division") in developing a standard quality measure set to enhance uniformity of reporting across the Commonwealth. The product of the SQAC should accordingly be recommendations to the Department to inform promulgation of regulations for measure reporting. Although the primary function of the SQAC will be its advisory role to the Department and the Division, the Committee may elect to express recommendations to the wider stakeholder community regarding adoption of the proposed SQMS, with the understanding that the Department is able to promulgate regulations only within its regulatory purview.

The SQAC does not have a defined end-date, and instead is intended to longitudinally reassess and expand upon the Standard Quality Measure Set. Members of the SQAC are defined by statute. In the event of an open seat, the Co-Chairs will propose nominees to the Governor of the Commonwealth of Massachusetts, who retains the prerogative to fill vacancies. The statute specifies that members serve for

two year terms. Members shall have one vote, and only members may vote. Designees are permitted for deliberation only. Members may resign at any time by notifying the Co-Chairs and the Secretary of the Executive Office of Health and Human Services in writing.

Ex officio members of the committee may elect to have one individual designated to attend in their absence over the course of an annual session. Designees have the authority to participate in all committee business and to vote on all matters. Committee members are required to provide written notification to the SQAC Co-Chairs identifying their designee. In accordance with the enabling statute, gubernatorially-appointed committee members may not delegate their voting authority to a designee. In the event a gubernatorially-appointed member is unable to attend a meeting, they may send a non-voting representative to the SQAC meeting on their behalf.

Any member of the SQAC shall fully disclose any relationship with an individual or with members of other organizations, which represents or has the potential to represent a conflict of interest or result in personal financial gain. The Co-Chairs shall preside over all meetings of the SQAC. In accordance with Massachusetts law, all meetings are subject to OML. Recommendations for revisions to the bylaws shall be considered at the prerogative of the Co-Chairs, and subject to approval by the Committee. The Co-Chairs shall submit them as approved into public record with or without changes.

Committee Scope, Process and Structure:

The SQAC will focus on identifying and endorsing measures for inclusion in the Standard Quality Measure Set and on recommending future priorities for quality measurement. With regard to measure identification, the SQAC will issue annual recommendations to the Department for the Standard Quality Measure Set. At a minimum, all endorsed measures will be reassessed every three years to ensure conformity with the priorities of the SQAC and reporting needs in the Commonwealth.

Nominating Non-Mandatory Measures for Evaluation:

Each member of the Committee will have the ability to nominate measures for evaluation during SQAC meetings through parliamentary process (nomination, second, deliberation, vote). A majority vote endorsing or rejecting a given measure will be sufficient for consensus. At appropriate times, public attendees will have the opportunity to propose measures for nomination. A member of the SQAC must subsequently nominate such measures to allow for formal consideration by the committee. The SQAC

Co-Chairs shall identify the appropriate time frame for measure nomination at the commencement of each annual session.

Approach to Evaluation of Measures: In assessing measures for inclusion in the recommended Standard Quality Measure Set, they will be evaluated against the criteria of priority, validity, and practicality. In keeping with the advisory role of the SQAC, the Co-Chairs will define priorities primarily through the expressed needs of the Department and the Division, but also with input from SQAC members and the public. Validity and practicality shall be semi-quantitatively scored based on alignment with the principles for quality measurement identified by the Health Care Quality and Cost Council (HCQCC).[14]

- ***Priority:*** measures should adhere to at least one of the Committee priority areas. Measures should utilize current public reporting requirements unless there is a demonstration that an enhanced approach is in the public interest.
- ***Validity:*** measures should be sound, just, and well-founded in accordance with HCQCC principles 1, 3, 5 & 6.
    - Wherever possible, measures should be drawn from nationally accepted standard measure sets
    - There must be empirical evidence that the measure provides stable and reliable information, and that the data sources and sample sizes are sufficient for accurate reporting at the level chosen
    - There must be empirical evidence that the measured entity (clinician, site, group, institution) is associated with a significant amount of the variance in the measure. The measures offered for providers should, in totality, be representative of a significant proportion of their practices, OR
    - The measure is important for patients or communities, even though a clear consensus on accountability for performance has not been determined.
    - Providers should be informed about the development and validation of the measures and given the opportunity to view their own performance, ideally for one measurement cycle, before the data are used for public reporting. Where feasible, providers should be permitted to verify data and offer corrections

[14] The HCQCC principles are available for review at http://hcqcc.hcf.state.ma.us/Content/AboutTheRatings.aspx.

- ***Practicality:*** measures that are pragmatic, able to be applied without extensive additional work, and meet the practical considerations of this project/program in accordance with HCQCC principles 2 & 4.
- Ease of data collection
- The measure must reflect something broadly accepted as meaningful to providers or patients
- There must be sufficient variability or insufficient performance on the measure to merit attention

As defined by the statute, the four mandated measure sets are a priority and therefore only the tests of validity and practicality should be applied. All measures except those in the mandated four sets must pass a "priority" test to be considered against other principles/criteria. A measure is considered practical based upon current data availability or whether a mechanism to collect the data is in place. A measure's validity will be considered based upon its alignment with the principles of the Health Care Quality and Cost Council.

All measures that meet the "priority" test are eligible for inclusion in the Standard Quality Measure Set. The performance of a measure or measure set against the tests of validity and practicality will determine the strength of the Committee's recommendation for their inclusion in the Standard Quality Measure Set.

- ***Strong recommendation***
  - If measure passes both the Practicality and Validity test, it is given a strong recommendation;
- ***Moderate recommendation***
  - If measure passes the Validity test, but not Practicality, the measure is considered valid, but further infrastructure development is needed for a strong recommendation;
  - If measure passes the Practicality test, but not Validity, the measure is considered not sufficiently valid, and further work on the methodology is needed for a strong recommendation;
- ***Weak recommendation***
  - If measure passes neither the Practicality nor Validity tests, the measure is given a weak recommendation.
- ***No recommendation***

- If a measure not specified by the enabling statute passes the Priority test, but not the Practicality or Validity tests, the Committee will make no statement with regards to recommendation. Such measures are eligible to be proposed again in future years

Process: Work group staff and consultants will assign preliminary quantitative ratings to each measure or measure set for each aspect. SQAC members will have an opportunity to ask for clarifications regarding the preliminary ratings and discuss potential adjustments to the ratings before voting to approve or disapprove. For further consideration, a measure must meet a minimum threshold of validity and practicality. All measures meeting this threshold will be categorized according to the strength of recommendation, determined by their scores on Validity and Practicality.

Annual Reporting Process: The deliverables to be released by the SQAC as part of its annual reporting process are described below.

- ***Annual Standard Quality Measure Set:*** the list of measures recommended for inclusion in the Standard Quality Measure Set, categorized by the strength of recommendation derived from alignment with the evaluation criteria.
- ***Measure Evaluation Reports:*** brief reports outlining how given measures align with the evaluation criteria, and any relevant discussion points. These reports will be released intermittently, following the Committee's decision whether or not to recommend a given measure or measure set.
- ***Annual Priorities Report:*** the document describing the Committee's recommendation for the future direction for the Commonwealth's quality measurement priorities as informed by the Co-Chairs, Committee, and the public at SQAC meetings.